Work Order ID 51834

September 4, 2009 9:57:15 AM

Item ID: D6101-015
Revision ID: B
Item Name: Saddle Billet

Accept

Setup Start
Stop

Start Date: 9/04/09 **Start Qty:** 20.00
Required Date: 9/16/09 **Req'd Qty:** 20.00
Reference:

Cust Item ID:
Customer:

Run Start
Stop

Approvals: **Process Plan:** CL **Date:** 09/09/04 **Tooling:** **Date:**
QC: **Date:** **SPC (Y/N):** **Date:**

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Draw Number	Draw Rev.	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	**Revision Nbr**								
D6101	B								
100		0.00							
Purchasing	PURCHASING								
Purchasing	**Memo** Issue P/O: 10365 a)Description: Alluminum billet b) 9.450" x 6.250" x 2.50" thick (+0.030 / -0.000) c) Tolerance on all dimensions are +0.030"/-0.000" d) Grain direction along 9.450" length e) Material: 7075-T7351 (QQ-A-250/12) f)Material certification required	0.00							
110	Receive & Inspect for Damage & Mat'l Certs	0.00							
Packaging									
Packaging	**Memo** Ensure material certification is attached	0.00							

PO 09-9-08 (20)

9/9/09 (20)

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ **PAR #:** _____ **Fault Category:** _____ **NCR:** Yes No **DQA:** _____ **Date:** _____

Resolution: _____ **Disposition:** _____ **QA: N/C Closed:** _____ **Date:** _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

H:\FORMS\Quality Assurance\approved QA\NCRWO RevE

Work Order ID 51834

September 4, 2009 9:57:15 AM

Item ID: D6101-015
Revision ID: B
Item Name: Saddle Billet

Accept

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Start Date: 9/04/09 **Start Qty:** 20.00
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Reference:

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Stop

Approvals: **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____
QC: _____ **Date:** _____ **SPC (Y/N):** _____ **Date:** _____

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Draw Number	Draw Rev.	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
120	QC6- Inspect dimensions to drawing	0.00				counters (X20)	ϕ		
QC		2) Sorlorka							
Quality Control	**Memo** Ensure Material certification comply to Dwg D6101	0.00							
130	Identify as per dwg & Stock Location:_____	0.00							
Packaging						CL 09/09/25 (20)			
Packaging	**Memo**	0.00							
140	QC21- Final Inspection - Work Order Release	0.00							
QC						09/09/28			
Quality Control	**Memo**	0.00							

MF 09-09-26

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ **PAR #:** _____ **Fault Category:** _____ **NCR:** Yes No **DQA:** _____ **Date:** _____

Resolution: _____ **Disposition:** _____ **QA: N/C Closed:** _____ **Date:** _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

H:\FORMS\Quality Assurance\approved QA\NCRWO RevE

Picklist Print

September 4, 2009 9:57:15 AM

Work Order ID: 51834

Parent Item: D6101-015RevB

Parent Item Name: Saddle Billet

Comments:

Start Date: 9/04/09 **Required Date:** 9/16/09

Start Qty: 20.00 **Required Qty:** 20.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
D6101-015PRevB ALUM BILLET		Purchased	No			110	Each	0.0000	20.0000		9/9/09	(20)

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ **PAR #:** _____ **Fault Category:** _____ **NCR:** Yes No **DQA:** _____ **Date:** _____

Resolution: _____ **Disposition:** _____ **QA: N/C Closed:** _____ **Date:** _____

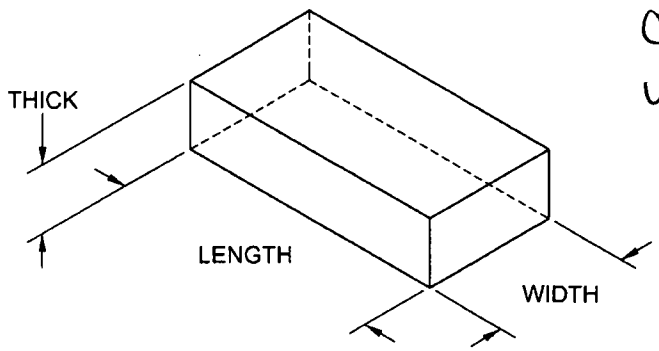
NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

H:\FORMS\Quality Assurance\approved QA\NCRWO RevE

SPECIFICATION CONTROL DRAWING

CL09/09/04
W10:51834



PURCHASE MATERIAL ACCORDING TO THE FOLLOWING TABLE. SPECIFY ALLOY, LENGTH x WIDTH x THICK (+0.030/-0.000), AND GRAIN DIRECTION AS SHOWN.

TOLERANCES ON ALL DIMENSIONS ARE +0.030/-0.000.

ALL DIMENSIONS ARE IN INCHES.

B ACCEPTABLE SPECIFICATIONS FOR 7075-T7351 ALUMINUM ARE AMS-QQ-A-250/12, QQ-A-250/12, OR ASTM B209

Part No.	Alloy	Length	Width	Thick	Grain Direction
D6101-001	7075-T7351 (QQ-A-250/12)	6.000	6.250	2.000	Along 6.000 Length
D6101-003	7075-T7351 (QQ-A-250/12)	7.875	6.250	2.000	Along 7.875 Length
D6101-005	7075-T7351 (QQ-A-250/12)	5.000	8.250	2.500	Along 5.000 Length
D6101-007	7075-T7351 (QQ-A-250/12)	7.750	8.250	2.500	Along 7.750 Length
D6101-009	7075-T7351 (QQ-A-250/12)	8.700	8.250	2.500	Along 8.700 Length
D6101-011	7075-T7351 (QQ-A-250/12)	9.700	8.250	2.500	Along 9.700 Length
D6101-013	7075-T7351 (QQ-A-250/12)	10.100	8.250	2.500	Along 10.10 Length
D6101-015	7075-T7351 (QQ-A-250/12)	9.450	6.250	2.500	Along 9.450 Length
B D6101-017	7075-T7351 (QQ-A-250/12)	6.350	6.250	2.250	Along 6.350 Length

RELEASED 09/07/15/NW

REV.	DESCRIPTION	BY	DATE
B	ADDED D6101-015/-017, ADD ASTM B209	RF	09.04.23
A	NEW ISSUE	CP	01.03.30

DESIGN	CP	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	RF		
CHECKED		DRAWING NO. D6101	REV. B SHEET 1 OF 1
MFG. APPR.			
APPROVED		TITLE SADDLE BILLET, 7075	SCALE NTS
DE APPR.			
DATE	09.04.23		

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Castle Metals®

A. M. Castle & Co.

PACKING SLIP

Pack Slip No:4116333

Ship From:	Sold To:	Ship To:	Deliver To:
Castle Metals MONTREAL 835-SELKIRK AVENUE POINTE CLAIRE, QUEBEC H9R 3S2	DART AEROSPACE LTD 1270 ABERDEEN HAWKESBURY, ON K6A 1K7	DART AEROSPACE LTD 1270 ABERDEEN HAWKESBURY, ON K6A 1K7	DART AEROSPACE LTD 1270 ABERDEEN HAWKESBURY, ON K6A 1K7 CA

Date Shipped	F.O.B.	Freight Terms	Carrier	BOL No	Delivery No
24-SEP-09	ORIGIN	Prepaid	LOCAL_FLEET	69346-5	4116333

Shipment Details	Final Destination Branch - MON

Order No	Line No	Item No	Description
284475	1	6879.MO S 09/09/24	2.5000.PL.7075.T7351.ALUMINUM.48.5000.144.5000 CUT 2SIDED TO 6.25 IN (+ .0310/- .0000 IN (GRAIN TO RUN ALONG 9.45")) X 9.45 IN (+ .0310/- .0000 IN (GRAIN TO RUN ALONG 9.45"))

Purchase Order No	Part Number	Ordered Qty	Invoice Qty	Backorder Qty
10365		20 PCS	20 PCS	

Details

Mill	Heat Number	Mech Id	PCS	Width (IN)	Length (IN)	Shipped Qty (LBS)
	407241		20			298.32

These commodities/technologies are subject to US Export Administration & US State Dept. Regulations and, if intended for export, were/are exported thereunder. Diversion contrary to US Law is Prohibited.

We hereby certify the material covered by this certification conforms in accordance with the above specifications and has been found to meet the applicable requirements for the material, including any specifications forming a part of the description. Test reports are on file subject to examination. All claims for defective material are waived unless made in writing to A.M. Castle & Co. within 60 days of the shipment. Material cut to the correct size, or material cut by the customer cannot be returned for credit.

This material has been received and inspected by:		Date:	

CERTIFIED INSPECTION REPORT

Alcoa Inc.

PITTSBURGH, PA DAVENPORT WORKS

Ship From: RIVERDALE, IA.

We hereby certify that the material covered by this certificate has been inspected with, and has been found to meet, the applicable requirements described therein, including any specifications forming a part of the description and that samples representative of the material met the composition limits and had the mechanical properties shown on the face of this sheet.
Per:

Malcolm Murphy
Director of Manufacturing Davenport Works

Kenton P. Young
Quality Assurance Manager

Ship Date	B.L. No.	Invoice No.	Alcoa No. Item	Page 1
2009-01-10	993938 0 3286081	00000	1000062308-1	

P.O. No./Govt Contract No.	Customer	Alcoa Item	Mfg Order
01-16543	CASTLE A M G041005634R08	DS-62308-1	

Ship To: A M CASTLE & COMPANY
3400 NORTH WOLF ROAD
BAY #6
FRANKLIN PARK 60131 IL

Item Description
2.5 IN TK (+.0750 -.0750) X 48.5 IN W (+.3125 -
0.000) X 144.5 IN LN (+.5 -0.0) CAT D 164168 (N) A/T 7075-
T7351 RECTANGLE MILL FINISH, USI 3MM DEAD ZONE REQ'D BOTH SIDES,
SAWED IAC 6879. EXC_MRK A97075-60 REV 22 AMS-QQ-A-250/12 IS 2007 AMS-
STD-2154 EXC_MRK AMS4078 REV G EXC_MRK ASTMB209
REV 07 ASTMB594 REV 06 BSS7055 REV A
EXC_MRK MMS159 REV N PS21211 REV K {(MARKED)}
KRAFT PAPER INTERLEAVED
MAX GROSS SKID WGT: 4500 LB QUAN TOL +/-
25 % USI CL A 3 MM CQR 0137890 REV 17 CUST REQ 09-01-
10 *** W/B 09-01-17 ***

09/09/24

Num	Package Ticket	Lot	Weight	Quantity	UOM	Pc Id/Serl
1	709661	407241	3570	2	PC	:

Notes for CQR: 0137890.17
PRODUCT PRODUCED TO THE REQUIREMENTS OF ASTMB2375 ALSO MEE T THE REQUIREMENTS OF AMS-STD-2154. PRODUCT PRODUCED TO TH E
REQUIREMENTS OF AMS-STD-2154 ALSO MEET THE REQUIREMENTS OF ASTMB2375.
THIS MATERIAL HAS BEEN ULTRASONICALLY INSPECTED FULLY IMME RSION - TYPE I.
PRODUCT PRODUCED AND MARKED TO THE REQUIREMENTS OF AMS-QQ- A-250/12 ALSO MEETS THE REQUIREMENTS OF QQ-A-250/12F. PROD UCT
PRODUCED AND MARKED TO THE REQUIREMENTS OF QQ-A-250/12 F ALSO MEETS THE REQUIREMENTS OF AMS-QQ-A-250/12.
Exception to Spec A97075-60 ; Revsn: 22 Issue: Letter dated 2007-05-14 from AHERN, DENNIS T to PLATTER, BARB .

CQR: 0137890.17 -Specification Limits ----------

Tmpr	Dir		UTS KSI	TYS KSI	EL4D PCT
T7351	Long Transv.	Max		63.9	
		Min	66.0	52.0	6

T7351 Elec. Cond. (EC) % MIN 38.0 PCT

Chemical Composition		SI	FE	CU	MN	MG	CR	ZN	TI	Other Each	Other Total	Aluminum
	Max	0.40	0.50	2.0	0.30	2.9	0.28	6.1	0.20	0.05	0.15	
Alloy 7075	Min			1.2		2.1	0.18	5.1				REMAIN

CERTIFIED INSPECTION REPORT

Alcoa Inc.

PITTSBURGH, PA DAVENPORT WORKS

Ship From: RIVERDALE, IA.

We hereby certify that the material covered by this certificate has been inspected with, and has been found to meet, the applicable requirements described therein, including any specifications forming a part of the description and that samples representative of the material met the composition limits and had the mechanical properties shown on the face of this sheet.
Per:

Malcolm Murphy
Director of Manufacturing Davenport Works

Kenton P. Young
Quality Assurance Manager

Ship Date	B.L. No.	Invoice No.	Alcoa No. Item	Page 2
2009-01-10	993938 D 3286081	00000	1000062308-1	

P.O. No./Govt Contract No.	Customer	Alcoa Item	Mfg Order
01-16543	CASTLE A M	G041005634R08	DS-62308-1

CQR: 0137890.17 -Specification Limits (cont.) ----------
Lot: 407241 - Mechanical, Physical, Metallography, Quantometer Results ----------

Tmpr	Dir	No-> Test	UTS KSI	TYS KSI	EL4D PCT
T7351	Long Transv.	3	70	58.4	10.3
			69.8	58.2	10.4
			70	58.4	10.4

T7351 Elect Cond %IACS 40.3 40.4 40.5 PCT

Cast Number	Chemical - OBS	SI	FE	CU	MN	MG	CR	ZN	TI
H9127043	Actuals	0.06	0.29	1.6	0.02	2.5	0.19	5.7	0.02

This material was melted in the United States or a Qualifying Country [RBF DFARS 225.872.1(a)]; it was manufactured in the United States

CASTLE METALS CORP.
DATE RCVD 1-14-09
IAC 68
APPROVED BY